

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Spectrum Task Force Invites Technical)	ET Docket No. 10-142
Input on Approaches to Maximize)	WT Docket Nos. 04-356 & 07-195
Broadband Use of Fixed/Mobile Spectrum)	
Allocations in the 2 GHz Range)	

COMMENTS OF VERIZON WIRELESS

Verizon Wireless hereby responds to the Spectrum Task Force’s invitation to provide technical input on approaches to encourage the growth of terrestrial mobile broadband services in the 2 GHz spectrum range.¹ The 2 GHz band is already an important band for mobile broadband services, and expanding the use of that band for future mobile broadband services is an important part of the Commission’s plan to make more than 500 MHz of commercial spectrum available within the next decade. As the Commission considers 2 GHz band plans, it should take care not to undermine ongoing efforts to reallocate Federal government spectrum for mobile broadband use. The potential reallocation of the 1755-1850 MHz band (in particular the 1755-1780 MHz band), currently under review by the administration, offers a valuable opportunity to establish a long-term spectrum plan that is harmonized with global spectrum allocations. The Commission should wait until a decision is made on reallocation of spectrum above 1755 MHz before making any final decisions on the 2 GHz spectrum.

¹ *Spectrum Task Force Invites Technical Input on Approaches To Maximize Broadband Use of Fixed/Mobile Spectrum Allocations in the 2 GHz Range*, Public Notice, DA 11-929 (rel. May 20, 2011).

In order to meet the important goal of making more than 500 MHz of commercial spectrum available, the Commission will need to explore various creative approaches to repurposing spectrum. Voluntary incentive auctions, in particular, are an innovative approach to repurposing spectrum that might help to promote mobile broadband deployment in various spectrum bands, including the 2 GHz MSS band, and we commend the Commission for its efforts to advance such an approach.²

As the Commission takes actions that will advance its spectrum goals, the Spectrum Task Force correctly recognizes the importance of spectrum harmonization and the potential synergies that exist between the 2 GHz MSS spectrum and neighboring bands. Harmonizing new spectrum allocations with existing spectrum uses in the United States and around the world will help to drive greater economies of scale, reduce the risk of harmful interference, and promote more rapid deployment of mobile broadband networks and services. Consequently, we agree with the Spectrum Task Force that a 2 GHz band plan should be considered that integrates the 2 GHz MSS spectrum with existing AWS allocations in adjacent bands. However, in developing such a band plan, the Commission should also take into account the synergies that exist with other spectrum bands, including those currently being considered for future reallocation.

The Public Notice seeks comment on three potential 2 GHz band plans. The first would provide for 40 MHz of paired flexible use terrestrial spectrum by leaving the 2 GHz MSS spectrum band plan essentially unchanged, i.e., 2000-2020 MHz paired with 2180-2200 MHz (“40 MHz Option”). The second would provide for 50 MHz of paired spectrum by adding to that allocation the AWS “J” block, i.e., 2020-2025 MHz paired with 2175-2180 MHz (“50 MHz

² See Comments of Verizon Wireless, ET Docket No. 10-142 (filed Sept. 15, 2010) (endorsing incentive auctions approach).

Option”). The third would provide for 60 MHz of paired spectrum by adding the “J” block as well as a portion of the AWS “H” block, i.e., 1995-2000 MHz, and a portion of the AWS-3 block, i.e., 2170-2175 MHz (“60 MHz Option”).

Each of the three potential band plans could potentially increase the availability of spectrum for mobile broadband. The 50 MHz Option, for example, could increase the utility of the AWS “J” block by aligning it with 40 MHz of additional spectrum, and, thus, increasing the interest in developing broadband technologies and services for use in the band. The 60 MHz Option would add the upper AWS “H” block spectrum, but would not eliminate the significant interference risks that exist with the PCS band.³

However, selecting either option at this time would undermine ongoing efforts to reallocate Federal government spectrum for mobile broadband use. There is broad industry support for reallocation of the 1755-1780 MHz band and the pairing of that spectrum with the currently unassigned 2155-2180 MHz band, which includes some of the spectrum covered by the options described in the Public Notice.⁴ As recommended in the National Broadband Plan,⁵

³ See, e.g., Joint Comments of Sprint Corporation and Verizon Wireless, WT Docket Nos. 04-356 & 00-353 (filed Dec. 8, 2004); Letter from Donald C. Brittingham, Verizon Wireless, to Marlene H. Dortch, FCC, WT Docket Nos. 04-356 & 07-195 (filed June 5, 2008). While adoption of the 60 MHz Option would avoid harmful interference into the PCS band from the lower portion of the H block (1915-1920 MHz), it would exacerbate the risk of interference into the PCS band from the upper portion (1995-2000 MHz) as there would be no guard band between the two bands.

⁴ See, e.g., Comments of Verizon Wireless, ET Docket No. 10-123, at 7-8 (filed June 28, 2010) (“Verizon Wireless agrees that a reallocation of some portion of the 1755-1850 MHz band is the best way to extend the AWS band and promote the deployment of wireless broadband services.”); Comments of T-Mobile USA, Inc., GN Docket Nos. 09-157 and 09-51, WT Docket No. 09-66, at 4 (filed Sept. 30, 2009); Comments of U.S. Cellular Corp., ET Docket No. 10-123, at 5-6 (filed Apr. 22, 2010).

NTIA has undertaken a comprehensive review of the 1755-1780 MHz band – and, in fact, the entire 1755-1850 MHz band – and a final decision on reallocation is expected by October of this year.⁶ Verizon Wireless urges the Commission not to take any action on the 2155-2180 MHz band until a final decision has been made on reallocation of spectrum above 1755 MHz. After NTIA completes the review, the Commission should revisit the potential band plans outlined in this Public Notice as well as consider other proposals.

Importantly, the 1755-1850 MHz band has been identified globally for advanced wireless services. Consequently, the potential reallocation of some (or all) of that spectrum in the United States provides a unique opportunity for the U.S. Government to establish a long term spectrum plan that is harmonized with spectrum allocations around the world. This opportunity should guide the Commission in its efforts to develop a cohesive 2 GHz band plan which includes any repurposed MSS spectrum and integrates it fully with current and future AWS spectrum.

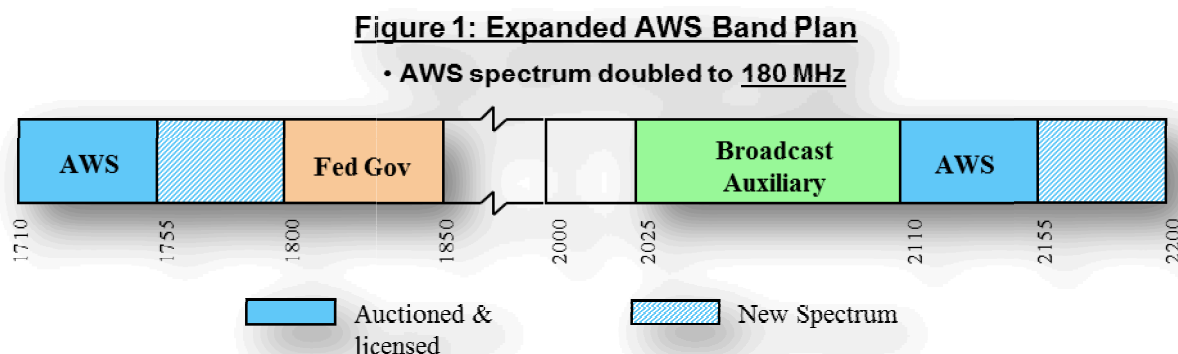
If the 1755-1780 MHz band is reallocated as contemplated, the AWS band would be expanded by 50 MHz to include the 1710-1780 MHz band for mobile transmissions (“uplink”) and the 2110-2180 MHz band for base station transmissions (“downlink”). By conforming the new spectrum to a band plan that is compatible with existing AWS spectrum, the Commission will promote more effective use of reallocated Federal spectrum as well as the currently unassigned AWS-3 and “J” blocks. This will result in larger economies of scale, lower cost

⁵ Federal Communications Commission, *Connecting America: The National Broadband Plan*, Recommendation 5.8.3 (rel. Mar. 16, 2010).

⁶ U.S. Department of Commerce, *First Interim Progress Report on the Ten-Year Plan and Timetable*, at 4 (rel. Apr. 4, 2011) (“NTIA continues to conduct technical analyses on 1755-1850 MHz and comparable spectrum bands and plans to complete the detailed evaluation of this band by September 30, 2011. “).

equipment, and more rapid deployment of broadband networks because licensees will be able to leverage the investments already being made in AWS.

If additional spectrum above 1780 MHz can be reallocated for commercial use, the Commission has an opportunity to significantly expand these benefits by conforming the repurposed MSS spectrum to the expanded AWS band plan. For example, if the 1780-1800 MHz spectrum were reallocated, that spectrum could be paired with the 2180-2200 MHz portion of the MSS band to yield a total of 180 MHz of broadband spectrum that is fully compatible with existing spectrum uses and globally harmonized.⁷ This expanded AWS band plan is illustrated in Figure 1.




Of course, NTIA may conclude that spectrum above 1780 MHz (or even the 1755-1780 MHz band) cannot be reallocated for commercial use. Nevertheless, the possibility of such a reallocation and the considerable benefits associated with optimizing this reallocated spectrum by aligning it with any repurposed MSS spectrum argue strongly in favor of the Commission waiting until a reallocation decision is made before making any final decisions on 2 GHz MSS.

⁷ If 1780-1800 MHz could not be reallocated, a comparable block of 20 MHz within the 1780-1850 MHz band should be considered.

The potential for a cohesive and optimized 2 GHz band plan is significantly increased through the use of a voluntary mechanism for repurposing 2 GHz MSS, such as incentive auctions, because it provides a unique opportunity to reconfigure the 2 GHz MSS spectrum. This reconfiguration will not only create significant benefits by aligning the spectrum with existing and future AWS spectrum, but it will also promote a more compatible interference environment. Today, the 1930-1990 MHz PCS band is used extensively across the country for base station transmissions (“downlink”). Use of the 2000-2020 MHz portion of the repurposed MSS band for mobile transmissions (“uplink”) would create a significant interference potential between these two systems. These interference risks would be avoided by moving the uplink segment of the band to reallocated spectrum above 1780 MHz, consistent with a logical expansion of the AWS band.

In sum, Verizon Wireless urges the Commission to defer any decision on 2 GHz band plans until NTIA completes its review of the 1755-1850 MHz band, which is now only three months away.

Respectfully submitted,

A handwritten signature in black ink that reads "John T. Scott, III". The signature is written in a cursive style with a horizontal line underneath the name.

John T. Scott, III
Vice President & Deputy General Counsel

Catherine M. Hilke
Counsel

VERIZON WIRELESS
1300 I Street, N.W.
Suite 400 West
Washington, D.C. 20005

Filed: July 8, 2011